

AMENDMENTS TO THE CLAIMS

Claims 1-5 (cancelled).

6. (currently amended) A method for screening for a modulator of neurodegenerative diseases, or related diseases or disorders of ~~one or more substances selected from the group consisting of~~

- (i) ~~a gene coding for rab31,~~
- (ii) ~~a transcription product of a gene coding for rab31,~~
- (iii) ~~a translation product of a gene coding for rab31~~ the amino acid sequence of SEQ ID NO: 1, and

- (iv) ~~a fragment, or derivative, or variant of (i) to (iii),~~

said method comprising:

- (a) contacting a cell with a test compound;
- (b) measuring the ~~activity and/or level of one or more substances recited in (i) to (iv)~~ a translation product of a gene coding for the amino acid sequence of SEQ ID NO: 1;
- (c) measuring the ~~activity and/or level of one or more substances recited in (i) to (iv)~~ a translation product of a gene coding for the amino acid sequence of SEQ ID NO: 1 in a control cell not contacted with said test compound; and
- (d) comparing the levels ~~and/or activities of the substance~~ of the translation product in the cells of step (b) and (c), wherein an alteration in the ~~activity and/or level of substances~~ the translation product in the contacted cells indicates that the test compound is a modulator of said diseases or disorders.

7. (currently amended) A method of screening for a modulator of neurodegenerative diseases, or related diseases or disorders of ~~one or more substances selected from the group consisting of~~

- (i) ~~a gene coding for rab31,~~
- (ii) ~~a transcription product of a gene coding for rab31;~~

(iii) — a translation product of a gene coding for ~~rab31~~ the amino acid sequence of SEQ ID NO: 1, and

(v) — ~~a fragment, or derivative, or variant of (i) to (iii)~~,

said method comprising:

- (a) administering a test compound to a test animal which is predisposed to developing or has already developed symptoms of a neurodegenerative disease or related diseases or disorders in respect of the ~~substances recited in (i) to (iv)~~ translation product;
- (b) measuring the ~~activity and/or level of one or more substances recited in (i) to (iv)~~ the translation product;
- (c) measuring the ~~activity and/or level of one or more substances recited in (i) or (iv)~~ the translation product in a matched control animal which is predisposed to developing or has already developed symptoms of a neurodegenerative disease or related diseases or disorders in respect to the ~~substances recited in (i) to (iv)~~ translation product and to which animal no such test compound has been administered;
- (d) comparing the ~~activity and/or level of the substance~~ translation product in the animals of step (b) and (c), wherein an alteration in the ~~activity and/or level of substances~~ the translation product in the test animal indicates that the test compound is a modulator of said diseases or disorders.

8. (currently amended) The method according to claim 7, wherein said test animal and/or said control animal is a recombinant animal which expresses a gene coding for ~~rab31~~ the amino acid sequence of SEQ ID NO: 1, ~~or a fragment, or a derivative, or a variant thereof~~, under the control of a transcriptional control element which is not the native rab31 gene transcriptional control element.

Claims 9-10 (cancelled).

11. (currently amended) The method of claim 6, wherein said screening is for a modulator of the ~~activity and/or level of a protein molecule shown in SEQ ID NO: NO: 1~~, ~~or a fragment, or~~

~~derivative, or variant thereof~~, and wherein said modulator is a reagent or compound for preventing, or treating, or ameliorating a neurodegenerative disease.

Claims 12-13 (cancelled).

14. (previously presented) The method of claim 6, wherein said neurodegenerative disease is Alzheimer's disease.

15. (previously presented) The method of claim 7, wherein said neurodegenerative disease is Alzheimer's disease.

Claims 16-19 (cancelled).

20. (previously presented) The method of claim 11, wherein the neurodegenerative disease is Alzheimer's disease.

21. (currently amended) The method of claim 7, wherein said screening is for a modulator of the ~~activity and/or~~ level of a protein molecule shown in SEQ ID NO. ~~NO: 1, or a fragment, or derivative, or variant thereof~~, and wherein said modulator is a reagent or compound for preventing, or treating, or ameliorating a neurodegenerative disease.

22. (previously presented) The method of claim 21, wherein the neurodegenerative disease is Alzheimer's disease.

Claims 23-24 (cancelled).